

REMARKS

Claims 1-42, and 50 are canceled and claims 43-49 and 51-55 are currently amended. Basis for the amendments can be found, for example in Tables 1-9 and page 65, lines 27-31. The specification has been amended to delete the duplicate recitation of related patents/applications as required by the Office. No new matter has been added. Entry is respectfully requested.

The rejection of claims 48 under the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,800,279 is respectfully traversed.

The Office states that although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-12 contain combinations of attractants which fall within the scope of claim 1. It then states that the method of claim 11 of said patent discloses a composition consisting of glycolic acid and acetone. The Office then states the composition of claim 2 of said patent discloses mosquito attracting amounts of lactic acid and butanone. It concludes that as such, it would be obvious to modify the composition claim

into a method of attracting mosquitoes with said claim.

A terminal disclaimer is filed herewith. Withdrawal of the instant rejection is respectfully requested.

The rejection of claims 43 and 51 under 35 USC 112, first paragraph, because the specification, while being enabled for the specific embodiments, i.e. those compounds or mixture of compounds which were tested and found to be effective in attracting *Aedes aegypti*, *Aedes albopictus* and *Anopheles albinmanus* does not reasonably provide enablement for all the compounds or mixtures of compounds with respect to all arthropods, or even all mosquitos is respectfully traversed.

The Office states that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The Office then states that, for instance, lactic acid is known to be a repellant to tsetse flies citing Voskamp et al, Abstract; Mihok et al., Abstract; and Saini et al., Abstract. The Office further states that different species of mosquitos are effected differently, i.e., attracted, repelled, or non-responsive, by various compounds, including compounds falling within the scope of Applicants' invention citing Takken et al., pgs 140-145, 1999;

Schreck et al, page 409, Table 2, 1990; and Kline et al., pages 386-390, 1990. The Office then states that even with respect to *Aedes aegypti*, altering the base structure of lactic acid has varying effects of the attractancy and/or repellency of the lactic acid derivative to *Aedes aegypti* citing Carlson et al., pages 329-331, 1973 and Davis et al., pages 445, Table 1, 1988. The Office then concludes that in light of the above, it appears that a skilled artisan would be required to do undue experimentation in order to make and/or use the invention commensurate in scope with the claims.

In response to Applicants arguments, the Office states that the preamble amendment does not necessarily limit the claim to attracting the same and cites *Jansen v. Rexall Sundown, Inc.* and concludes that the claims of the instant specification still broadly encompass any mosquito attracting amount of lactic acid and butanone and maintains the rejection.

Claim 43 and 51 have been amended to recite "*Aedes aegypti*, *Aedes albopictus*, and *Anopheles albimanus*..." attracting amounts.

Withdrawal of the instant rejection is respectfully requested.

The rejection of claim 48 under 35 USC 102(b) as being anticipated by Carlson et al. is respectfully traversed.

The Office states that Carlson expressly discloses a composition containing glycolic acid and acetone and cites page 330, Table 1 of the reference. The Office has duly considered the Applicants' arguments and states that the use of the composition does not patentably distinguish the prior art from the claimed invention and that the fact remains that a composition consisting of acetone and glycolic acid was prepared. The Office lastly states that what occurred after the preparation, i.e., placing the glycolic acid/acetone composition on the walls of a sample tube and then passing nitrogen and carbon dioxide gas after the solution has evaporated does not overcome this fact.

Newly amended claim 48 recites Aedes aegypti, Aedes albopictus, ~~and~~ or Anopheles albinmanus attracting amounts of glycolic acid and acetone. Carlson teaches the use of 25, 50 and 100 µgs of glycolic acid wherein an acetone solution of sulfuric acid is used to acidify the glycolic acid salt. So the composition taught by Carlson et al would be glycolic acid, acetone, and sulfuric acid. (See Table 1, footnote b of the reference). The Federal Circuit states that the anticipation determination is viewed from one of ordinary skill in the art and that there must be no difference between the claimed invention and the reference disclosure as viewed by a person of ordinary skill in the field of the invention, *Scripps Clinic & Research Foundation v.*

Genentech Inc., 927 F. 2d 1565, 18 USPQ2d 1001, 1010 (Fed Cir, 1991). Anticipation required the disclosure in a single prior art reference of each element of the claim under consideration. It is not enough, however, that the reference disclose all the claimed elements in isolation. The rejection is improper.

The rejection of claims 45, and 52 under 35 USC 103(a) as being unpatentable over Smith et al (Annals of the Entomological Society of America, 1970) in view of Paganessi et al. (U.S. Patent No. 5,943,815) is respectfully traversed.

The Office states that Smith et al teaches that the combination of lactic acid and carbon dioxide is an effective mosquito attractant citing page 766 of the reference. The Office then states that Paganessi et al teach that the combinations of acetone with carbon dioxide is an effective attractant for mosquitoes citing column 2, lines 53-68, and column 3, lines 1-25. The Office then states that the difference between the prior art and the claimed invention is that the prior art does not expressly disclose compositions and methods of attracting

mosquitoes consisting of lactic acid, acetone and carbon dioxide. The Office then states that the prior art amply suggests the same as it is known in the art that the combination of lactic acid or acetone, each with carbon dioxide is effective in attracting mosquitoes. The office then states that as such, it would have been well within the skill of and one of ordinary skill in the art would have been motivated to combine lactic acid, acetone and carbon dioxide with the expectation that the same would be effective in attracting mosquitoes.

Applicants respectfully submit that the combination of Smith in view of Paganessi fails to render the instantly claimed invention *prima facie* obvious because as stated by the Office, the combination fails to teach the combination of lactic acid, acetone and CO₂. Each teach a two component composition, not a three component composition. In each instance one of ordinary skill in the art would be led to include CO₂. However, there is no direction as to what second compound would be preferred and absolutely no direction to use a third compound in the composition. The combination of references fails to teach a composition and a method for attracting *Aedes aegypti*, *Aedes albopictus* and *Anopheles albinmanus* using *Aedes aegypti*, *Aedes albopictus* and *Anopheles albinmanus* attracting amounts of lactic acid, acetone and Carbon dioxide as recited in the claims. S stated in the Office action, on page 3, different species of

mosquitos are effected differently, i.e. attracted, repelled or non-responsive, by various compounds including compounds falling within the scope of Applicant's invention. The Office concludes on page 4, it appears that a skilled artisan would be required to do undue experimentation in order to make or use the invention commensurate in scope with the claims. Therefore, Applicants respectfully submit that the combination of references fail to teach one of ordinary skill in the art at the time the claimed invention was made, how to make and use the instantly claimed invention without undue experimentation.

The rejection is improper. Applicants respectfully request withdrawal of the instant rejection.

The rejection of claims 46, 47, 53, and 54 under 35 USC 103(a) as being unpatentable over Smith et al. in view of Wilson et al. is respectfully traversed.

The Office states that Smith teaches that lactic acid and the combination of lactic acid and carbon dioxide is an effective mosquito attractant citing page 766 of the reference. The Office then states that Wilson teaches that dimethyl disulfide is effective in attracting mosquitoes citing column 8, lines 44-60.

The Office then states that the difference between the prior art and the claimed invention is that the prior art does not expressly disclose compositions or methods for attracting

mosquitoes consisting of lactic acid and dimethyl disulfide or lactic acid, dimethyl disulfide and carbon dioxide. The Office further states that the prior art amply suggest the same as lactic acid, lactic acid and carbon dioxide and dimethyl disulfide are known to be attractants for mosquitoes. The Office concludes that it would have been well within the ordinary skill of one of ordinary skill in the art would have been motivated to modify the prior art as above with the expectation that the combination lactic acid and dimethyl disulfide and the combination of lactic acid, dimethyl disulfide and carbon dioxide would be effective in attracting mosquitoes citing *In re Kerkhoven* and *Ex parte Quadranti* (*supra*). The Office concludes that the claimed invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the claimed invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

Applicants respectfully submit that the combination of references fail to teach the instantly claimed invention and fail to render the instantly claimed invention *prima facie* obvious especially in light of the Office's statement that the difference between the prior art and the claimed invention is that the prior art does not expressly disclose compositions or methods for attracting mosquitoes consisting of lactic acid, dimethyl

disulfide and carbon dioxide.

Smith teaches CO₂ and lactic acid for *Aedes aegypti*. Wilson et al. teaches the use of dimethyl disulfide alone. Wilson fails to teach that dimethyl disulfide could be used in combination with any other compound for attracting mosquitoes.

Applicants respectfully submit that the combination of Smith in view of Wilson fails to render the instantly claimed invention *prima facie* obvious because as stated by the Office, the combination fails to teach the combination of lactic acid, dimethyl disulfide and CO₂. The combination of references fails to teach a composition and a method for attracting *Aedes aegypti*, *Aedes albopictus* and *Anopheles albinmanus* using *Aedes aegypti*, *Aedes albopictus* and *Anopheles albinmanus* attracting amounts of lactic acid, dimethyl disulfide and Carbon dioxide as recited in the claims. As stated in the Office action, on page 3, different species of mosquitos are effected differently, i.e. attracted, repelled or non-responsive, by various compounds including compounds falling within the scope of Applicant's invention. The Office concludes on page 4, it appears that a skilled artisan would be required to do undue experimentation in order to make or use the invention commensurate in scope with the claims. Therefore, Applicants respectfully submit that the combination of references fail to teach one of ordinary skill in the art at the time the claimed invention was made, how to make and use the

instantly claimed invention without undue experimentation.

The rejection is improper. Applicants respectfully request withdrawal of the instant rejection.

The rejection of claims 49 and 55 under 35 USC 103(a) as being unpatentable over Smith et al (supra) in view of Carlson et al. (supra) is respectfully traversed.

The Office states that Smith et al. teaches that lactic acid and the combination of lactic acid and carbon dioxide is an effective mosquito attractant citing page 766 of the reference. The Office then states that Carlson et al teach that lactic acid is an effective mosquito attractant and that glycolic acid in combination with carbon dioxide is an effective mosquito attractant citing page 330, Table 1, and page 331. The Office states that the difference between the prior art and the claimed invention is that the prior art does not expressly disclose compositions and methods consisting of glycolic acid, carbon dioxide, and lactic acid. The Office then states that the prior art amply suggests the same as lactic acid and carbon dioxide, and glycolic acid and carbon dioxide are know in the art to attract mosquitoes. The Office states that as such it would have been well within the skill and one of ordinary skill in the art would have been motivated to modify the prior art as above with

the expectation that the combination of glycolic acid, carbon dioxide, and lactic acid would be effective in attracting mosquitoes citing *In re Kerkhoven* and *In re Quadranti* (*supra*). The Office concludes that the claimed invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the claimed invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

Applicants respectfully submit that the combination of references fail to render the instantly claimed invention of claims 49 and 55, since claim 1 has been canceled, *prima facie* obvious especially in light of the Office's statement above which states that the difference between the prior art and the claimed invention is that the prior art does not expressly disclose compositions and methods consisting of glycolic acid, carbon dioxide, and lactic acid.

Smith teaches CO₂ and lactic acid for *Aedes aegypti*. Carlson et al teach the use of glycolic acid with carbon dioxide. Neither reference teaches a three component attractant in a composition or in a method of using the composition. Applicants respectfully submit that the combination of Smith in view of Carlson et al. fails to render the instantly claimed invention *prima facie* obvious because as stated by the Office, the combination fails to teach the combination of lactic acid,

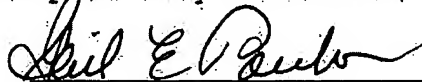
glycolic acid and CO₂. The combination of references fails to teach a composition and a method for attracting *Aedes aegypti*, *Aedes albopictus* and *Anopheles albinmanus* using *Aedes aegypti*, *Aedes albopictus* and *Anopheles albinmanus* attracting amounts of lactic acid, glycolic acid and Carbon dioxide as recited in the claims. As stated in the Office action, on page 3, different species of mosquitoes are effected differently, i.e. attracted, repelled or non-responsive, by various compounds including compounds falling within the scope of Applicant's invention. The Office concludes on page 4, it appears that a skilled artisan would be required to do undue experimentation in order to make or use the invention commensurate in scope with the claims. Therefore, Applicants respectfully submit that the combination of references fail to teach one of ordinary skill in the art at the time the claimed invention was made, how to make and use the instantly claimed invention without undue experimentation.

The rejection is improper. Applicants respectfully request withdrawal of the instant rejection.

In the event this paper is deemed not timely filed, the undersigned hereby petitions for an appropriate extension of time. Please charge any fees, which may be required by this paper or at any time during prosecution of the instant application, or credit any overpayment, to deposit account 50-2134.

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DATE

Respectfully Submitted,



Gail E. Poulos

Patent Advisor

Registration No. 36,327

USDA-ARS-OTT

5601 Sunnyside Avenue, Room 4-1184

Beltsville, Maryland 20705-5131

Telephone: (301) 504-5302